

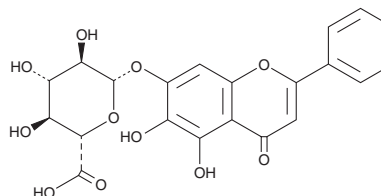
PRODUCT INFORMATION



Baicalin

Item No. 19843

CAS Registry No.: 21967-41-9
Formal Name: 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl-β-D-glucopyranosiduronic acid
Synonym: Baicalein 7-glucuronide
MF: C₂₁H₁₈O₁₁
FW: 446.4
Purity: ≥95%
UV/Vis.: λ_{max}: 215, 246, 277, 313 nm
Supplied as: A crystalline solid
Storage: Room temperature
Stability: ≥4 years
Item Origin: Plant/*Radix scutellariae*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Baicalin is supplied as a crystalline solid. A stock solution may be made by dissolving the baicalin in the solvent of choice, which should be purged with an inert gas. Baicalin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of baicalin in these solvents is approximately 5 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of baicalin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of baicalin in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Baicalin is a flavonoid that has been found in *S. baicalensis* and has diverse biological activities.¹⁻⁵ It reduces myocardial apoptosis and increases cardiac microvessel levels of endothelial nitric oxide synthase (eNOS) in a rat model of ischemia-reperfusion injury when administered at doses of 30 and 100 mg/kg. Baicalin (50 and 80 mg/kg) increases the number of intratumor CD8⁺ T cells and reduces tumor volume in an H22 murine hepatocellular carcinoma model.² It reduces LPS-induced cortical production of reactive oxygen species (ROS) and levels of IL-1β and TNF-α in a mouse model of neuroinflammation.³ Baicalin decreases body weight, increases the number of rats with regular estrous cycles, and ameliorates follicular development in a mouse model of dehydroepiandrosterone-induced polycystic ovary syndrome (PCOS).⁴ It also decreases immobility time in the forced swim test in a mouse model of depression induced by chronic mild stress.⁵

References

1. Bai, J., Wang, Q., Qi, J., et al. *Phytomedicine* **63**, 153035 (2019).
2. Ke, M., Zhang, Z., Xu, B., et al. *Int. Immunopharmacol.* **75**, 105824 (2019).
3. Shah, M.-A., Park, D.-J., Kang, J.-B., et al. *J. Vet. Med. Sci.* **81(9)**, 1359-1367 (2019).
4. Wang, W., Zheng, J., Cui, N., et al. *J. Ovarian Res.* **12(1)**, 109 (2019).
5. Lu, Y., Sun, G., Yang, F., et al. *Biomed. Pharmacother.* **116**, 109054 (2019).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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